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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,191	02/12/2002	John A. Szymbor	EH-10586	4463
30188 7590 02/06/2007 PRATT & WHITNEY 400 MAIN STREET MAIL STOP: 132-13 EAST HARTFORD, CT 06108			EXAMINER PICKARD, ALISON K	
			ART UNIT 3673	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/074,191

Applicant(s)

SZYMBOR ET AL.

Examiner

Alison K. Pickard

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12,15-20,24-30 and 44-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12,15-20,24-30 and 44-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                      | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 12, 15-20, and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Howe.

Howe discloses a method and a brush seal comprising arranging a plurality of tufts 11 each having a bead 10 at one end within a fixture 15 in a skewed fashion and so that a portion (at line 11 in figures 4 or 5) of the bristles forming the tufts with the beads projects to form an exposed portion. The exposed ends are then clamped with plates and welded 18 while the tufts are in the fixture (see col. 4, lines 3-8). The brush seal is a unitary structure comprised of a weld joint, bristles, and plates.

3. Claims 12, 15-20, and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoffmueller (6,062,463).

Hoffmueller discloses a method and brush seal comprising a plurality of tufts each having a bead 40 or 43 at one end within a fixture in a skewed fashion. The beaded portion of the tufts

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forms an exposed end in recess 31. The exposed end and plates 30 are then welded together in that the coating on the bead can be solder, while the tufts are still in the fixture (see figures).

4. Claims 24-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Atkinson.

Atkinson discloses a method of making a brush seal comprising providing discrete plates 69, 79, 89 and discrete bristle arrangements 60, 70, 80, 90 in a stack within a fixture 53 and simultaneously joining them (i.e. via the ring 56 to lock them in place) while in fixture 53. The bristles 66 are joined along a length by a joint (weld).

5. Claims 24-29 and 44-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Datta.

Data discloses a method and brush seal comprising plural discrete plates 126 and bristle arrangements 112/125 stacked within a fixture 122 or 214 and then joined together via weld (e.g. Fig. 8). As stated in column 5, lines 60-64, a multistage seal can be made by attaching plural strips with double rails (i.e. first plate, second plate, etc.) directly to a housing (fixture) by a weld.

#### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 30 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Datta in view of Millener.

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Datta discloses a plurality of bristle arrangements 112 having a weld joint 125, a back plate (of 214), a single middle plate 126/226 between one bristle set and a second one, and a front plate (of 214). Millener teaches using a windage cover on the front plate to reduce disturbing forces that may lift bristles from the shaft. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the front part of housing 214 with the windage cover taught by Millener.

### ***Response to Arguments***

8. Applicant's arguments filed 11-22-06 have been fully considered but they are not persuasive.

The bristles are welded while still in fixture 15 in Howe.

Regarding Hoffmueller, the bristles project beyond the bottom surface of groove 31 of the fixture so that the bristles are exposed.

Regarding Atkinson, the components are considered to be joined together by the ring 56 in that they are all held "together" within the housing.

Data does disclose plural plates and bristles welded together within a housing. Figure 8 and col. 5, lines 60-64, for example, disclose this.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 571-272-7062.

The examiner can normally be reached on M-F (10-7:30), with alternate Friday's off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tricia Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Alison K. Pickard  
Primary Examiner  
Art Unit 3673

AP